

A Summary of Research and Resources Related to State School Funding Formulas

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Overview of the Request

In August 2009, REL Midwest received a request from the Iowa Legislative Services Agency to provide a brief discussion of state school funding formulas to be disseminated at the October 5, 2009, meeting of the Iowa School Finance Formula Review Committee. The committee is convening to review the state's school funding provisions, as required by school funding statute (Iowa Code 257.1). The work of this interim committee will result in a report that will include recommendations for revisions to the school finance formula, which will be submitted to the Iowa General Assembly by January 1, 2010. Pursuant to Iowa Code 257.1(4):

The report shall include recommendations for school finance formula changes or revisions based upon demographic changes, enrollment trends, and property tax valuation fluctuations observed during the preceding five-year interval; an analysis of the operation of the school finance formula during the preceding five-year interval; and a summary of issues that have arisen since the previous review and potential approaches for their resolution.

Background on School Funding Considerations

Much of the literature about school funding formulas attempts to establish and define the primary concern or concerns of a state school funding system, with the debate focusing on the concepts of *equity* and *adequacy* of school funding. (For a primer on equity and adequacy issues from the perspectives of various researchers see Augenblick, Myers, & Anderson [1997], Guthrie [2001], and Hanushek [1997].)

Equity

State school funding systems often are framed around achieving equity. Equity has been conceptualized two ways: as equal treatment from individual to individual, or *horizontal equity*, and as appropriate treatment for each individual depending on the individual's unique educational needs, or *vertical equity*.

Adequacy

Adequacy of funding refers to the amount of funding required to accomplish the goals of the education system (e.g., students are provided with reasonable supports to help them meet state standards). These goals are determined by each individual educational system.

Other Considerations

Policymakers might take into account several other related considerations when deciding how to structure school funding. For example, a [checklist for Wisconsin policymakers](#) includes such considerations as school district autonomy and the equitable treatment of taxpayers (which draws heavily from Augenblick, Van de Water, and Myers [1995]).

State Studies

Numerous statewide education cost analyses have been conducted to determine the appropriate costs to create successful, high-achieving students and districts. These studies employ various techniques. The *professional judgment approach* (e.g., Guthrie, Calvo, & Smith, 2001) pulls from the experience of educators to highlight specific resources necessary for schools to meet performance standards. Based upon the resources noted by educators, costs can be calculated. The *successful school district approach* (e.g., Augenblick, Palaich and Associates, Inc., 2003) assumes that estimating the cost of adequacy can be based on examining the spending of school districts that are meeting student performance expectations. This particular approach yields a base cost figure for schools. The *evidence-based or state-of-the-art approach* (e.g., Odden, Picus, Archibald, Goetz, Mangan, & Aportela, 2007) utilizes research in best practices to identify all the school-level components needed to provide a comprehensive and high-quality education to students. This approach identifies components through research that uses either randomized trials or types of controls or statistical procedures that separate the impact of the treatment and examines best practices that are codified in a comprehensive school design or derived from impact studies at the local district or school level. The evidence-based analysis then calculates the costs of the components and uses these cost figures to determine an adequate spending base for each school. *Cost differential studies* (e.g., Chambers, Taylor, Robinson, Esra, & Schuldt, 2003) in education are used to examine the variation in expenditure for a child with particular demographic characteristics. For example, a study can examine the monetary differences of educating a child in a rural, urban, or suburban location.

Legal Action

School funding formulas have been subjected to legal scrutiny, and state formulas have been challenged by lawsuits in the great majority of states. The legal activity, which has been rooted in both federal and state law, parallels the academic debate about the key concerns of a funding formula, with lawsuits typically challenging the formulas on either equity or adequacy grounds.

A [recent presentation about legal challenges to funding formulas](#) by the Iowa Association of School Boards provides a summary of the types of actions that may be brought under federal or state law. In addition, the National Access Network provides information about [litigation on state school funding](#), including a [state-by-state listing of relevant legal activity](#), which indicates that Iowa is one of only five states without a court decision related to the state's education finance system.

Funding Formula Variations

State aid to local education agencies (LEAs) consists of two parts: categorical funding and basic support. Categorical funding is provided to address specific policy goals or problems and must be utilized in a manner prescribed by the legislature. Basic support is distributed to districts using a state-derived funding formula. The purpose of state funding formulas in education is to create a standardized method for resource distribution statewide. There are four primary types of basic support: flat grants, foundation programs, reward-for-effort programs, and full state funding programs (Seikle & Holmes, n.d.).

Each of these types of basic support can be modified using weights that are based on educational need. There is no fixed way that states determine these weights; they can be based on information collected in adequacy studies, stakeholder input, or the status of the state budget, among other considerations. For example, a student with typical educational needs might receive a weight of 1.00, while a special-needs student may receive a weight of 1.25. Other student populations that may receive higher funding levels due to increased perception of need include grade-level, English-language learners (ELLs), and students with behavioral or emotional disorders.

Flat Grants

Flat grants are defined by allocation per unit. Each unit (e.g., pupil, teacher, full-time equivalent students) is multiplied by a fixed dollar amount. This system does not necessarily account for equitable distribution of resources across the state.

Foundation Programs

Foundation programs are the most popular form of state funding formulas, with the majority of states, including Iowa, employing some version of this model. Such programs establish a minimum funding level per pupil. Districts must contribute what they are able toward that minimum amount; the state then makes up the difference to ensure that all districts receive the minimum funding level. In most states that employ this model, local districts can contribute additional dollars to the per-pupil minimum guaranteed by the state. There are a few versions of this funding model:

- One type of *foundation/base formula* assigns each student a weight determined by his or her educational needs.
- A *modified foundation/base formula* does not require the same minimum per-pupil base funding for all districts. Instead, local education authorities have differing minimums.
- The *dollar funding per student* model mandates by legislation the exact dollar amount that each student requires for education. Student needs vary according to educational needs such as in the foundation/base formula.

Reward-for-Effort Programs

There are several types of *reward-for-effort* programs, such as percentage equalization or guaranteed tax base/yield programs. Such programs are based on the premise that LEAs should determine their own spending and taxation levels. Local control of such issues is believed to incentivize school district contribution toward education because decision-making authority is localized.

- *Percentage equalization* programs establish a ratio for which the state will provide aid. Districts determine the spending level they wish to achieve and then allow for state aid to equalize the level of fiscal effort. Although, theoretically, there is no maximum amount of expenditures the state will match, in practice several states have capped these expenditures.

- *Guaranteed tax base/yield* programs differ from percentage equalization programs in that while percentage equalization programs focus on expenditure units, guaranteed tax base/yield programs focus on tax effort.

Full State Funding Programs

Hawaii utilizes *full state funding* using a *weighted student formula*. Recent research has examined the viability of weighted student formulas as a tool for achieving equitable and adequate school funding (e.g., Ladd, 2008; Thomas B. Fordham Institute, 2006).

Several other types of formulas combine one or more of these approaches. For example, a *teacher allocation* formula allocates funding based on ratios of that resource needed per student. For example, an acceptable student-to-teacher ratio might be 20:1. If a district has 100 students, the state would provide funding for five teachers for that district.

Policymakers might consult several sources when trying to understand more about the types of funding formulas and the individual variations implemented in each of the states. Specifically, Education Commission of the States (ECS) summarizes the [types of funding formulas](#) and lists [state activity regarding funding formulas](#) on its website. The Center for Public Education features a [table of state funding formulas](#) on its website. In addition, the National Center for Education Statistics has published a detailed but somewhat dated [report that includes state-by-state information](#). The Iowa Legislative Services Agency has published a [legislative guide](#) detailing the current school funding system in Iowa.

Additional Resources

Several resources may be useful to policymakers working on matters related to state school funding formulas:

General Resources

- The [American Education Finance Association](#) (AEFA) provides several relevant resources, including its annual “[State of the States and Provinces](#)” report, which summarizes school funding policy activity across the United States and Canada.
- ECS provides several resources on funding formulas, including an [overview page](#), a summary of [types of funding formulas](#) and list of [state activity regarding funding formulas](#), and examples of [how states approach specific funding issues](#), such as those related to small and isolated school districts and ELLs or special education students.
- [The Education Trust](#) features a [list of publications related to school funding](#) on its website.
- *Education Week*’s Research Center features an [overview of school finance matters](#).
- The National Conference of State Legislatures (NCSL) highlights multiple resources on school finance listed at the [NCSL Education Finance Resource Page](#).
- The [Urban Institute](#) website includes a [School Finance](#) page with links to publications.

University-Based Resources

- The [Center on Reinventing Public Education](#) at the University of Washington features relevant resources on its website for the [School Finance Redesign Project](#).
- The [Consortium for Policy Research in Education](#), a collaboration of the University of Wisconsin–Madison, the University of Pennsylvania, Harvard University, the University of Michigan, and Stanford University, includes school finance resources and tools for policymakers on its [School Finance and Resource Allocation](#) webpage.
- [Education Next](#), based at Harvard University, is a journal about education issues. Its [School Spending](#) webpage includes relevant research and commentary.
- The [Hoover Institution](#) at Stanford University has published commentary on public policy issues, including [education finance](#).
- The [Peabody Center for Education Policy](#) at Vanderbilt University includes resources about school finance on its [list of publications](#).

State Reports

Several consulting firms have been contracted by states to conduct school funding studies:

- [American Institutes for Research \(AIR\)](#)
- [Augenblick, Palaich, and Associates \(APA\)](#)
- [Lawrence O. Picus and Associates](#)
- [Management Analysis and Planning \(MAP\)](#)

Iowa-Specific Resources

- Recent presentations by the Iowa Association of School Boards cover topics related to school funding formulas: a general presentation titled [School Finance in Iowa](#), as well as a [presentation about legal challenges to funding formulas](#).
- Iowa Legislative Services Agency has produced several publications related to school finance issues in the state, including a guide about [Basic Iowa Education Finance](#) and briefings on [Categorical Allowable Growth](#) and [Regular Program Allowable Growth](#).

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